

The Slippery Slope from Pluralistic to Plural Societies

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Abstract

Academic consensus about normative prescriptions on the ethnic and cultural composition of societies has been shifting in recent decades. It has evolved from what seemed desirable but was acknowledged to be unrealistic (the noble idea of a *melting pot*), to what is realistic because it has already happened, but might be undesirable in the long run: the *multicultural* diaspora. *Plural societies*, an unintended consequence of multiculturalism, lurk in the background. Thus scholars of social and economic questions, as well as societies, face a three-horned dilemma. We throw some light on the dilemma by examining school friendship networks in five European countries with recent immigration. Our results highlight the force of elective affinities in overcoming differences, but they also point to the countervailing forces of elective discordance that are currently driving increasing division.

1 The dilemma of plural societies

Recent changes in demographic and migration patterns, fast in pace and large in size, have raised the question of the stability and cohesion of multiethnic and multicultural societies. Philosophically, there are several very different approaches to the problem.

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The aim of this survey is to review and compare these approaches, considering a specific case study of school friendship network formation in some European countries.

A first approach is multiculturalism, previously known as cultural pluralism, conceived in direct contrast to the melting pot idea (Kallen 1915, 1924). Multiculturalism is a prescriptive idea, both in the early version of Kallen and in more recent ones (Kymlicka 1995, 2007). Its main thesis is that members of minority groups should be allowed and even encouraged to maintain their specific group characteristics (culture, religion, language, political and moral traditions). This prescription might be desirable if it could be shown that the society in which these minority groups live can maintain a satisfactory degree of coherence and stability. However, multiculturalism and cultural pluralism are firmly grounded in the realm of normative ideas, focusing on what is desirable as opposed to what is possible. The possible unintended consequences of multicultural prescriptions are seldom considered carefully.

A second prescriptive theory, summarized in the image of the ‘melting pot’, poses a general acquisition of shared norms and cultural attitudes by the population of a country as desirable and possibly conducive to social stability. The metaphor originated with *The Melting Pot*, a play by Israel Zangwill first staged in 1908, and then developed into a theory by Sollors (1980, 1986), among others.¹ The difficulties of the project were already evident in the prophetic book by Glazer and Moynihan (1963). When the book was published, the alloy had been in the melting pot for almost 40 years, since the Immigration Act of 1924, but when they investigated the state of bonding of five ethnic groups in New York City, Glazer and Moynihan found that no significant progress toward a common culture had occurred. Thirty-four years later, Glazer’s unconditional surrender to multiculturalism, *We Are All Multiculturalists Now*, was published (Glazer 1997). The book was received with an unjustified sneer:² Glazer was pointing out a transformation common to many contemporary social scientists. Since reality had not obliged by adjusting to the ‘melting’ dreams of prescriptive philosophy, philosophy had responded by declaring

¹ In the words of David Quixano, the Russian Jewish immigrant to America who is the spokesperson for the idea:

‘Ah, Vera, what is the glory of Rome and Jerusalem where all nations and races come to worship and look back, compared with the glory of America, where all races and nations come to labour and look forward!’

² ‘*Nathan Glazer Changes His Mind, Again*’, commented New York Times columnist James Traub (1998). Still better than the vitriol reserved for the heretical almost contemporary Moynihan report, guilty of stating facts on another controversial issue:

‘A planning meeting was called, which I attended, and there the prospective executive director of the White House Conference on Civil Rights, Berl Bernhard, stood up and said with a wide smile on his face, "I have been reliably informed that no such person as Daniel Patrick Moynihan exists." And when the conference was in fact held, the report was absent, Moynihan was not invited, and the subject was never mentioned’ (Wilson 2009, p. 29).

Like Yezhov, in the dustbin of history.

the current state of affairs, namely multicultural scattering, as the best of all possible worlds.

A third view points out that profound differences in preferences, skills and widely accepted norms between populations may render diverse societies inherently unstable. If institutions, political arrangements and social norms are expressions of the underlying characteristics of a population, there may be a threshold of sustainable differences beyond which an acceptable degree of social cohesion is simply impossible. Some political and social scientists analyzing the question of the stability of multicultural or multiethnic societies have already emphasized the risk of instability associated with a high degree of diversity. In this literature, a *pluralistic society* is defined as a diverse society, in which individuals maintain different beliefs but are willing to ignore or at least downplay these differences in the political arena. In the language of Rabushka and Shepsle (1972), the differences are not politically salient. In contrast, a *plural society* is one in which differences are preserved over time and even progressively emphasized. In such societies, different groups bring their individual differences and needs into the political arena. Thus, a plural society is one in which democratic stability is extremely hard to maintain; plurality is the root cause of democratic instability, as indicated by the subtitle of Rabushka and Shepsle's classic book (see also Furnivall 1948 and Lijphart 1977).

In positive and analytical research, it is therefore essential to understand the conditions that guarantee the political and social stability of the host community by comparing the benefits from each of these policies. Proponents of the multicultural proposition do not usually directly and specifically address potential problems arising from emphasis on the preservation of minority characteristics. Yet one can view the main impact of multicultural ideas as precisely that of making differences salient, namely of transforming a society from pluralistic to plural.

In this chapter we focus on a pathway from diversity to instability that is slightly different from salience. If the identity of a minority is preserved and amplified, then it is more likely that members of the group select individuals from their own community in their network of social contacts. If so, the risk that individuals will self-select into relatively isolated cells becomes real. This emphasis on differences and their persistence then produces the condition for a society organized on the basis of segregated networks, a plural society, and the instability associated with it.

To illustrate this point with an example different from the main focus of the chapter, let us consider the egalitarian argument regarding language of Kymlicka and other liberal theorists of multiculturalism. They emphasize that requiring one language for public schools and public services automatically provides a linguistic advantage that violates the condition of luck egalitarianism, according to which individuals should be considered responsible only for inequalities in outcomes that result from their own choices. Chance inequalities, or more precisely unchosen circumstances, should instead be the collective responsibility of citizens. Even accepting the normative premises of the argument, which is a far-from-natural assumption, it is clear that two very different solutions are possible. One is to construct a society with as many languages as there are ethnic and heritage components, and try to make it work. The other is to agree on a single language, and try to make the transition to that

language easier for non-speakers. The different implications for social stability of the two solutions are clear.

In order to test whether the emphasis placed on ethnicity by multicultural policies is based on actual preferences and behaviors, we investigated friendship networks among primary and secondary schoolers in five European countries. The results summarize and expand earlier work by the authors (Rapallini and Rustichini 2016, 2019; Campigotto et al. 2021). Our main goal was to assess and compare the predictive power of two different groups of individual traits on peer choices. The first group consisted of ethnic characteristics, including country of origin, generational status and religion; we also considered measures of genetic and cultural distance, which to our knowledge have never been used to estimate peer preferences before. The second group consisted of non-ethnic attributes related to personality, interests and skills. We refer to the ties of sympathy or attraction elicited by these non-ethnic traits as *elective affinities*.

The results indicate that friendship choices depend on elective affinities as much as they do on ethnic backgrounds. On one hand, this supports the idea that elective affinity, rather than ethnic identity, could serve as the conceptual underpinning of integration policies; on the other, it suggests that lack of affinity between groups may produce social cleavages and erode cohesion.

The rest of the chapter is organized as follows. Section 2 presents the data and descriptive statistics. Section 3 discusses the estimation strategy and results. Section 4 contains some concluding remarks.

2 Data and descriptive statistics

2.1 The ChildrenFI and CILS4EU surveys

Peer preferences were investigated using data from two surveys, one of Italian primary school students (henceforth *ChildrenFI*) and one of English, German, Dutch and Swedish secondary school students (henceforth *CILS4EU*). These countries are among the most ethnically diverse in Europe: as of January 2019, non-nationals accounted for 12.2% of the population in Germany, 9.3% in the UK, 9.0% in Sweden, 8.7% in Italy and 6.2% in the Netherlands (Eurostat 2020).

The ChildrenFI survey was developed by two of the authors (CR and AR). Two waves of data were collected between 2011 (wave 1) and 2015 (wave 2) from 21 classes in seven schools in the Florence area. The first wave was conducted when children attended 2nd grade, the second when they attended 5th grade (i.e. the last grade of primary school). A total of 453 and 464 students participated in the first and second surveys, respectively. Our final sample, excluding participants with missing data for the variables of interest, consisted of 389 students in the first wave and 446 in the second (Table 1). Schools participating in the project were chosen at the time of wave 1 by the Italian Regional Education Board. Only children who were present

on the day of the questionnaire and who had been granted parental consent were surveyed.

The CILS4EU (Children of Immigrants Longitudinal Study for Four European Countries) survey collects information from nationally representative samples of secondary schools in England, Germany, the Netherlands and Sweden (Kalter et al. 2016). We used data from the first two waves of the survey, which were conducted in academic years 2010-11 and 2011-12. The target population consisted of students who, at the time of the study design, attended the grade where the majority of 14-year-olds are found. In each country, a comprehensive list of schools was partitioned into four strata according to the schools' proportion of immigrant students enrolled in the relevant grade. Schools were then drawn from each stratum with probabilities proportional to their size, and two classes per school were randomly selected to participate in the survey. Overall, 471 schools were included in the study. A total of 18,716 and 13,999 students were surveyed in waves 1 and 2, respectively; after excluding respondents with relevant missing data, we were left with samples of 16,040 students in wave 1 and 12,930 students in wave 2 (Table 2).

2.2 Individual and dyad characteristics

Respondents of the two surveys were classified as having a migration background if they themselves or at least one of their parents were born outside the survey country. From here on we write ij to denote a pair (also called dyad) of classmates, indexed i and j . We say that members of dyad ij differ in migration background if i had a migration background and j had not, or vice versa. Students' ethnic origin was determined based on their parents' country of birth. Individual i 's country of origin was the country where his mother was born, unless this was the survey country, in which case the country of origin was the father's country of birth. If information on one parent was missing, information on the other parent was used (the number of such occurrences in the two samples was $n_{\text{ChildrenFI}} = 0$ and $n_{\text{CILS4EU}} = 235$, respectively); when no information on parents was available, the student's countries of birth and origin were assumed to coincide ($n_{\text{ChildrenFI}} = 0$; $n_{\text{CILS4EU}} = 55$). Individuals whose country of origin was the survey country are referred to as majority group members.

Tables 1 and 2 present data on the demographic composition of the samples. Male and female students were present in roughly equal proportions. Foreign-borns constituted about 6.5% and 9.5% of the pooled ChildrenFI and CILS4EU samples, respectively; the proportions of students with a migration background were about four times larger. Only a small number of classes consisted exclusively of majority group students (ChildrenFI: one class in wave 1 and no classes in wave 2; CILS4EU: 26 classes in wave 1 and 37 classes in wave 2). The ethnic composition of schools largely reflected that of the survey countries: for instance, immigrants in the ChildrenFI sample were mainly of eastern European, Chinese and Moroccan origin (in line with what we know about the country at large; see ISTAT 2020). Pakistani and ex-Yugoslavs were the most numerous minority group in English and Swedish schools,

respectively, whereas Turkish immigrant students were the majority in Germany and the Netherlands.

[Table 1 here]

[Table 2 here]

Building on recent population differentiation research, we matched ij dyads to measures of genetic and cultural distance between i 's and j 's countries of origin. Summary statistics are shown in Table 3. Genetic distance was measured by the fixation index F_{ST} , which is the ratio of between-group to total variance of alleles (e.g. variants of the gene for hair color) at a certain locus in the genomes of two populations (Cavalli-Sforza et al. 1994). The index can take values between 0 and 1, with higher values indicating more differentiation; an F_{ST} of 0 means that there are no differences in allele frequency, while an F_{ST} of 1 means complete separation. Genetic data was collected by Pemberton et al. (2013) and used by Spolaore and Wacziarg (2018) to calculate country-pair distances.

Pairwise cultural distances were estimated by Muthukrishna et al. (2020) using information from the World Values Survey (data and details on survey questions are available at <http://culturaldistance.com>). Their cultural fixation index (CF_{ST}) is calculated in the same manner as F_{ST} , with questions about cultural values treated as loci and answers treated as alleles. The index used data from the last three waves of the survey (1999-2004, 2005-2009 and 2010-2014). CF_{ST} was available for 82.4% of dyads in the ChildrenFI sample and 70.6 percent of dyads in the CILS4EU sample, whereas F_{ST} was available for 82.4% and 71.3% of dyads, respectively. The average and maximum values of CF_{ST} were higher than those of F_{ST} , suggesting that differences were more pronounced along cultural than along genetic lines. In both samples, the two indexes were highly correlated.

Elective affinities were investigated with respect to school achievement and the Big 5 personality traits — Extraversion, Agreeableness, Conscientiousness, Neuroticism and Mental openness. We focused on achievement in mathematics, which reflects analytical skills and interest in the subject matter. Information on the grades of English and Swedish students was only collected at wave 2. Personality traits, only available for students in the ChildrenFI sample, were assessed from information provided by teachers, who were asked to fill in a 65-item questionnaire for each student. The questionnaire was developed specifically to study personality in late childhood (see Barbaranelli et al. 2003 for details), and each personality trait was measured as the sum of the answers to 13 questions rated on a 5-point Likert scale. The minimum and maximum values were therefore 13 and 65, respectively. Descriptive statistics and correlations are shown in Table 4.

Finally, the size of a student's house (as measured by the number of rooms, kitchen and bathroom excluded) was used as a proxy for household wealth.

[Table 3 here]

[Table 4 here]

2.3 Network descriptives

In both surveys, respondents were asked to name their five best friends in the class. This allowed us to identify students' strongest ties and reconstruct class friendship networks. Let Y_{ij} be a binary variable taking value 1 if an undirected link exists between students i and j , and 0 otherwise. We say that a pair of children is linked by an undirected link whenever a friendship nomination from i to j was reciprocated by a nomination from j to i .

Individual data on friendship nominations and links are shown in Table 5. In the ChildrenFI sample, an average of 3.96 and 4.15 nominations per student was made in waves 1 and 2, respectively, compared to an average of 3.32 and 2.42 in the CILS4EU sample. The average numbers of undirected links were 2.40 (wave 1) and 2.39 (wave 2) in the ChildrenFI sample and 2.20 (wave 1) and 1.61 (wave 2) in the CILS4EU sample. This difference in numbers may possibly reflect friendships becoming more selective as children move into adolescence (see Section 3.2 on this point). In both samples, the difference by gender in the average number of links was significant at wave 2 ($p\text{-value}_{\text{ChildrenFI}} < 0.001$; $p\text{-value}_{\text{CILS4EU}} = 0.036$) but not at wave 1 ($p\text{-value}_{\text{ChildrenFI}} = 0.920$; $p\text{-value}_{\text{CILS4EU}} = 0.883$), while the number of links of majority group students was always significantly higher than that of students with a migration background ($p\text{-value} < 0.001$ in all samples and waves). The last row of the top and bottom panels in Table 5 shows the reciprocity index $R = 2n_U/n_S$, where n_U and n_S are the numbers of undirected links and nominations made in a network, respectively. Since $n_S \geq 2n_U$ by definition, R can take values between 0 (no nomination is reciprocated) and 1 (all nominations are reciprocated). The index calculated on our samples ranged from about 60 to 65%, that is roughly 3/5 of friendship nominations were reciprocated.

Figures 1 and 2 show that the proportions of dyads sharing a certain characteristic were typically higher for friends than for non-friends. For example, in the case of Italian children, 93% of dyads in which $Y_{ij} = 1$ consisted of same-sex students, while the same was true for only 43% of dyads in which $Y_{ij} = 0$ (the other columns of the diagrams are interpreted analogously). These comparisons do not take into account mixing opportunities (e.g. single-sex classes) and other factors that may influence friendship; nevertheless, they suggest homophilic preferences with respect to both co-ethnic and non-co-ethnic characteristics.

[Table 5 here]

[Figure 1 here]

[Figure 2 here]

3 Estimates

3.1 Empirical strategy

The model we estimated was:

$$\Pr \left\{ Y_{ij,l,t} = 1 \mid \mathbf{x}'_{ij,l,t}, \bar{\mathbf{x}}'_{i,l,t}, \bar{\mathbf{x}}'_{j,l,t} \right\} = \Lambda \left(\beta_0 + \mathbf{x}'_{ij,l,t} \beta_1 + \bar{\mathbf{x}}'_{i,l,t} \beta_2 + \bar{\mathbf{x}}'_{j,l,t} \beta_3 + \theta_l + \theta_t \right),$$

where $\Lambda(x) = \exp(x) / [1 + \exp(x)]$ is the cumulative logistic distribution function. The subscripts i and j denote individuals, while the subscripts l and t denote classes and time, respectively. The probability of an undirected link between students i and j was regressed on two sets of variables: $\mathbf{x}_{ij,l,t}$ is a vector of dyad characteristics (same sex, different migration background, and so on), while $\bar{\mathbf{x}}_{i,l,t}$ and $\bar{\mathbf{x}}_{j,l,t}$ are the proportions of individuals in class l who are similar to i and j in the characteristics considered. This approach allowed us to control for how common each characteristic was in a class, i.e. for mixing opportunities. The terms θ_l and θ_t denote class and time fixed effects, which control for unobservable class-specific factors and time trends. Finally, to take into account the tendency of individuals to form triangular links and cliques, all regressions controlled for the number of friends that i and j share.

The number of dyadic observations available for estimation was $\sum_{l=1}^L (k_l(k_l - 1))/2$, where k_l and L are the number of respondents in class l without any missing data and the number of classes, respectively.

3.2 Results

Table 6 shows estimates for the ChildrenFI sample, with a focus on ethnicity and migration background. Entries are average marginal effects with clustered standard errors at the class level. Column 1 reports the results of our benchmark specification, which regressed the probability of an undirected link on students' gender, country of origin, religion, age and house size. Gender stands out as the main predictor of friendship: on average, the probability of a link was about 16 percentage points higher for same-sex dyads than for different-sex dyads. The country-of-origin effect was highly significant but about one-third that of gender. Columns 2 to 5 show the results of alternative specifications; the coefficient on migration background (column 2) was only significant at the 10% level, while those on genetic and cultural distance (columns 3 and 4) were significant at the 1% level (for the sake of interpretability, both fixation indexes were multiplied by 100). All these coefficients had the expected negative sign. When CF_{ST} and F_{ST} were entered in the regression together (column

5), the former was significant and the latter was not; however, the joint hypothesis that both coefficients were zero was rejected at the 99% confidence level.

Figure 3 makes further use of the fixation indexes, examining how the effect of gender varied with genetic and cultural distance. Results for the ChildrenFI sample are shown in the left-hand panels. The marginal effect for dyads with $F_{ST} = 0$ (i.e. dyads where i 's and j 's countries of origin were the same) exceeded 17%, whereas for dyads with $F_{ST} = 0.045$ it was less than 10%; similarly, the marginal effect was about 19% when $CF_{ST} = 0$ and 7% when $CF_{ST} = 0.2$.

Results for the CILS4EU sample are reported in Table 7 and the right-hand panels of Figure 3. The coefficient on gender was roughly two-thirds that estimated for Italian children, while the coefficients on country of origin, migration background and F_{ST} were about the same in size and significance. Perhaps the most striking difference between the two sets of results was that European adolescents had a clear tendency to bond with peers who were similar in age, religion and wealth, whereas Italian children did not. This finding is consistent with a long-standing strand of literature documenting that from adolescence onward, the importance of similarity as a basis for peer selection increases, cleavages in friendship patterns become more pronounced, and individuals' close friends tend to decrease in number (DuBois and Hirsch 1990; Field 1999; Hallinan and Teixeira 1987).

[Table 6 here]

[Table 7 here]

[Figure 3 here]

Table 8 shifts the focus to school proficiency and personality traits. Each additional regressor is a binary variable taking value 1 if i 's and j 's scores in a certain attribute (e.g. Extraversion) were higher (or lower) than the class median score. Columns 1 and 2 show estimates of the predictive power of math skills in the two samples. The omitted reference category consisted of dyads where students' grades were one above and one below the class median grade; compared to them, dyads with higher and lower grades had a significantly higher probability of having a link. Column 3 gives estimates for personality traits. High Extraversion, high Conscientiousness and high Mental openness all had a significant positive effect; conversely, the coefficient on high Neuroticism had a negative sign, meaning that on average, neurotic students had a lower probability of bonding with each other than with non-neurotic individuals. Finally, when math was entered in the regression together with the Big 5 (column 4), its effect lost significance due to the correlation between school grades and Conscientiousness and Mental openness. The joint hypotheses that these variables equalled zero were both rejected at the 95% confidence level. Overall, these results support the view that elective affinities based on personality, interests and skills are an important source of social bonding.

[Table 8 here]

4 Concluding Remarks

The results of this study contribute to understanding the complex relationship between cultural, religious and geographic origins of individuals in a society and social network formation. A study of this relationship in all its facets will require rich articulated research into the role of many possible social networks (for example, those formed in the framework of education, work, entertainment, political activity and so on). Such research will only be possible with the outcomes of separate contributions analyzing each of these specific networks in detail. We implemented this research in one of the possible contexts, that of elementary and high school. Although we recognize that this is only one of many possible networks, we also think that it is one of the most important. As a case study, it is also revealing of dynamics that may be operating elsewhere; thus, our conclusions may help provide hypotheses on mechanisms operating in different contexts.

Here and in our previous studies, the specific object of investigation has been the comparison of the strength of two classes of factors operating in a multicultural and multiethnic society. Individuals in groups with different geographic, ethnic and cultural background have a large variety of characteristics and personality traits. The differences between random individuals in groups are typically much larger than the differences between representative individuals across groups; so if we look at the intersection of the support of the distribution of characteristics of two groups, the overlap is large.

The strength of elective affinities. As a consequence, elective affinities between individuals of different groups may act as a powerful force in gradually removing the separation between groups. If two students become friends on the basis of common personality traits (such as curiosity, intelligence, openness and extraversion), as well as more general features such as interests in reading and entertainment, then links between individuals (for instance ‘best friend’ links) are likely to transcend ethnic, religious and heritage boundaries. Instead, if links are established on the basis of heritage, then a mechanism perpetuating differences is in place. In this case, an emphasis or even a positive attitude to prescriptions bent on preserving such differences (as in the multicultural idea) may have profoundly adverse effects in the long run.

Elective affinities and discordances. Elective affinities face natural difficulties. One should not forget that their flip side is elective discordance, which holds for human beings as much as for chemical substances. Individuals may choose to act with an eye to dis-similarities because their underlying preferences and skills induce them to do so. Integration is made harder by a gradual increase in the size of the recent immigrant population, everything else being equal. In the initial stages, when the fraction of immigrants from a region, religion or ethnic background is small, it is very difficult for individuals of that group to live in a community of

peers, simply because the community is not large enough, and links with people with different characteristics happen by necessity. As the pool of immigrants of a certain group increases, the risk that individuals of that group self-segregate increases. A second factor working against elective affinities has been a shift in the viewpoint of the political class, academia, press and general public, from one favoring assimilation to one that looks with sympathy at preservation of differences. The spread of multicultural views is slowly producing conditions for a shift from stable pluralistic societies to plural ones.

The growing diversity of the populations entering a society will certainly profoundly change that society. Whether lack of elective affinity between groups will make social cohesion in such societies ultimately hard to maintain is an open question of vital importance.

References

- Barbaranelli, Claudio, Gian Vittorio Caprara, Annarita Rabasca, and Concetta Pastorelli (2003), "A questionnaire for measuring the Big Five in late childhood", *Personality and Individual Differences* vol. 34, no. 4, pp. 645–664.
- Campigotto, Nicola, Chiara Rapallini, and Aldo Rustichini (2021), "School Friendship Networks, Homophily and Multiculturalism: Evidence from European Countries", *Journal of Population Economics*, forthcoming.
- Cavalli-Sforza, Luigi L., Paolo Menozzi, and Alberto Piazza (1994), *The History and Geography of Human Genes*, Princeton (NJ): Princeton University Press.
- DuBois, David L. and Barton J. Hirsch (1990), "School and Neighborhood Friendship Patterns of Blacks and Whites in Early Adolescence", *Child development* vol. 61, no. 2, pp. 524–536.
- Eurostat (2020), *Migration and migrant population statistics*, http://ec.europa.eu/eurostat/statistics-explained/index.php/Migration_and_migrant_population_statistics. Retrieved: 10/2020.
- Field, Dorothy (1999), "Continuity and Change in Friendships in Advanced Old Age: Findings from the Berkeley Older Generation Study", *International Journal of Aging and Human Development* vol. 48, no. 4, pp. 325–346.
- Furnivall, John S. (1948), *Colonial Policy and Practice: A Comparative Study of Burma and Netherlands India*, Cambridge (UK): Cambridge University Press.
- Glazer, Nathan (1997), *We Are All Multiculturalists Now*, Cambridge (MA): Harvard University Press.
- Glazer, Nathan and Daniel P. Moynihan (1963), *Beyond the Melting Pot: The Negroes, Puerto Ricans, Jews, Italians, and Irish of New York City*, Cambridge (MA): MIT Press.
- Hallinan, Maureen T. and Ruy A. Teixeira (1987), "Students' Interracial Friendships: Individual Characteristics, Structural Effects, and Racial Differences", *American Journal of Education* vol. 95, no. 4, pp. 563–583.

- ISTAT (2020), *Data and indicators on immigrants and new citizens*, <http://stradati.istat.it/?lang=en>. Retrieved: 10/2020.
- Kallen, Horace M. (1915), “Democracy versus the Melting Pot”, *Nation* vol. 100, no. 2590, pp. 190–194.
- (1924), *Culture and Democracy in the United States Studies in the Group Psychology of the American People*, New York (NY): Boni and Liveright.
- Kalter, Frank, Anthony F. Heath, Miles Hewstone, Jan O. Jonsson, Matthijs Kalmijn, Irena Kogan, and Frank van Tubergen (2016), *Children of Immigrants Longitudinal Survey in Four European Countries (CILS4EU) – Reduced version*, Reduced data file for download and off-site use. GESIS Data Archive, Cologne, ZA5656 Data file Version 2.3.0, [doi:10.4232/cils4eu.5656.2.3.0](https://doi.org/10.4232/cils4eu.5656.2.3.0).
- Kymlicka, Will (1995), *Multicultural Citizenship: A Liberal Theory of Minority Rights*, Oxford: Oxford University Press.
- (2007), *Multicultural Odysseys: Navigating the New International Politics of Diversity*, Oxford: Oxford University Press.
- Lijphart, Arend (1977), *Democracy in Plural Societies: A Comparative Exploration*, New Haven (CT): Yale University Press.
- Muthukrishna, Michael, Adrian V. Bell, Joseph Henrich, Cameron M. Curtin, Alexander Gedranovich, Jason McInerney, and Braden Thue (2020), “Beyond Western, Educated, Industrial, Rich, and Democratic (WEIRD) Psychology: Measuring and Mapping Scales of Cultural and Psychological Distance”, *Psychological Science* vol. 31, no. 6, pp. 678–701.
- Pemberton, Trevor J., Michael DeGiorgio, and Noah A. Rosenberg (2013), “Population Structure in a Comprehensive Genomic Data Set on Human Microsatellite Variation”, *G3: Genes, Genomes, Genetics* vol. 3, no. 5, pp. 891–907.
- Rabushka, Alvin and Kenneth A. Shepsle (1972), *Politics in Plural Societies: A Theory of Democratic Instability*, Columbus (OH): Charles E. Merrill Publishing.
- Rapallini, Chiara and Aldo Rustichini (2016), “Elective affinities matter as much as ethnicity in multi-ethnic schools”, *Journal of Economic Behavior & Organization* vol. 131, pp. 243–262.
- (2019), “Personality and cognitive skills in network of friends, for multi-ethnic schools”, *Research in Economics* vol. 73, no. 1, pp. 1–14.
- Sollors, Werner (1980), “A Defense of the Melting Pot”, *The American Identity: Fusion and Fragmentation*, ed. by Rob Kroes, Amsterdam: Amerika Instituut, pp. 181–214.
- (1986), *Beyond Ethnicity: Consent and Descent in American Culture*, New York (NY) and Oxford: Oxford University Press.
- Spolaore, Enrico and Romain Wacziarg (2018), “Ancestry and development: New evidence”, *Journal of Applied Econometrics* vol. 33, no. 5, pp. 748–762.
- Traub, James (1998), “Nathan Glazer Changes His Mind, Again”, *The New York Times*, <https://www.nytimes.com/1998/06/28/magazine/nathan-glazer-changes-his-mind-again.html>. Retrieved: 10/2020.
- Wilson, James Q. (2009), “Foreword: Pat Moynihan Thinks about Families”, *Annals of the American Academy of Political and Social Science* vol. 621, pp. 28–33.

Table 1: Descriptive statistics (ChildrenFI data)

	Wave 1	Wave 2
Students	389	446
Schools	7	7
Classes	21	21
Class size (mean±SD)*	21.97±2.42	22.51±2.53
Females (%)	47.04	48.65
Age (mean±SD)	6.96±.43	9.91±.38
Foreign-borns (%)	5.91	7.17
Migration background (%)	25.71	28.48
Biggest minority	Chinese	
Catholics (%)	81.80	82.52
Protestants (%)	0.96	1.03
Muslims (%)	5.51	5.40
Atheists/agnostics (%)	7.43	6.94
Others (%)	4.30	4.11

*Excluding students who did not take part in the survey

Table 2: Descriptive statistics (CILS4EU data)

	Wave	EN	GE	NL	SW	Overall
Students	1	3,601	4,115	4,136	4,188	16,040
	%	22.45	25.65	25.79	26.11	100.00
	2	2,859	3,393	3,207	3,471	12,930
	%	22.11	26.24	24.80	26.85	100.00
Schools		107	135	100	129	471
Classes		208	252	222	251	933
Class size*	1	23.48±6.39	20.82±5.37	22.06±5.43	21.72±4.34	21.97±5.47
(mean±SD)	2	20.51±6.32	18.99±6.01	18.78±5.31	19.53±4.32	19.42±5.54
Females (%)	1	50.54	49.55	51.76	51.74	50.92
	2	50.09	50.55	52.39	51.22	51.08
Age (mean±SD)	1	15.35±.49	15.82±.75	15.56±.64	15.03±.27	15.44±.64
	2	16.35±.49	16.77±.73	16.53±.62	16.02±.26	16.42±.62
Foreign-borns (%)	1	11.72	9.53	6.65	11.08	9.68
	2	12.66	8.90	6.17	10.31	9.44
Migration background (%)	1	35.55	43.91	30.61	41.60	38.00
	2	38.58	42.44	28.41	40.42	37.56
Biggest minority		Pakistani	Turkish	Turkish	Ex-Yugoslav	
Christians (%) [‡]	1	36.57	-	-	49.09	43.42 [§]
	2	37.43	-	-	49.12	44.16 [§]
Catholics (%)	1	-	31.45	15.01	-	-
	2	-	32.01	14.90	-	-
Protestants (%)	1	-	31.37	9.31	-	-
	2	-	30.92	10.01	-	-
Muslims (%)	1	12.02	20.46	14.58	15.81	15.84
	2	13.64	19.01	12.97	14.69	15.17
Atheists/ agnostics (%)	1	41.46	12.25	53.53	31.45	34.46
	2	40.50	13.17	55.69	32.47	34.94
Others (%)	1	9.94	4.47	7.56	3.65	6.28
	2	8.42	4.89	6.43	3.72	5.74

*Excluding students who did not take part in the survey

[‡]Christian denominations not assessed in England and Sweden[§]Includes Catholics and Protestants

Table 3: Genetic and cultural distances

	ChildrenFI	CILS4EU
F_{ST}^{\ddagger}	Mean	0.78
	SD	1.54
	Min	0.00 (same country of origin)
	Max	4.83 (<i>i</i> Chinese, <i>j</i> Peruvian)
CF_{ST}^{\ddagger}	Mean	5.15
	SD	7.92
	Min	0.00 (same country of origin)
	Max	22.20 (<i>i</i> Chinese, <i>j</i> Italian)
$F_{ST}-CF_{ST}$ correlation	0.89*	0.77*

\ddagger Multiplied by 100 to obtain a 0-100 scale

*Significant at the 5 percent level or better

Table 4: Personality traits (ChildrenFI pooled data)

	Mean±SD	Min	Max	Correlations		
				Male	Mig. background	Math grade
Extraversion	44.21±9.70	9	64	-0.01	-0.17*	0.33*
Agreeableness	45.14±8.88	16	65	-0.27*	-0.06	0.26*
Conscientiousness	43.09±11.46	11	65	-0.28*	-0.06	0.62*
Neuroticism	30.31±10.54	11	64	0.14*	-0.08*	-0.16*
Mental openness	41.96±11.49	14	65	-0.03	-0.12*	0.68*

*Significant at the 5 percent level or better

Table 5: Friendship nominations and links

		(a) ChildrenFI	
		Wave 1	Wave 2
		(mean±SD)	(mean±SD)
Nominations made	Overall	3.96±1.32	4.15±1.92
	Females	4.05±1.30	3.99±1.28
	Foreign-borns	3.74±1.60	3.84±1.22
	Mig. background	3.72±1.59	4.05±1.23
Undirected links	Overall	2.40±1.41	2.39±1.46
	Females	2.39±1.44	2.13±1.33
	Foreign-borns	1.39±1.34	1.50±1.22
	Mig. background	1.82±1.38	2.01±1.44
Reciprocity index		0.60±0.06	0.58±0.08
		(b) CILS4EU	
		Wave 1	Wave 2
		(mean±SD)	(mean±SD)
Nominations made	Overall	3.32±1.60	2.42±1.72
	Females	3.17±1.60	2.33±1.72
	Foreign-borns	3.10±1.69	2.25±1.83
	Mig. background	3.25±1.64	2.30±1.81
Undirected links	Overall	2.20±1.45	1.61±1.43
	Females	2.20±1.43	1.64±1.41
	Foreign-borns	1.95±1.48	1.41±1.40
	Mig. background	2.12±1.45	1.48±1.41
Reciprocity index		0.65±0.14	0.66±0.15

Figure 1: Proportions of dyads with same characteristics, with 95% confidence intervals (gender, migration background, country of origin)

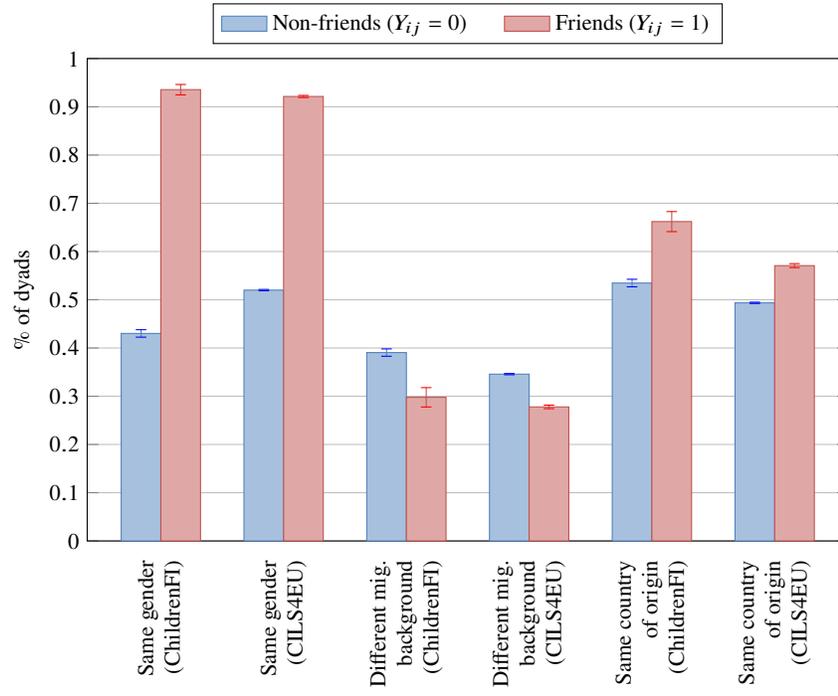


Figure 2: Proportions of dyads with same characteristics, with 95% confidence intervals (elective affinities)

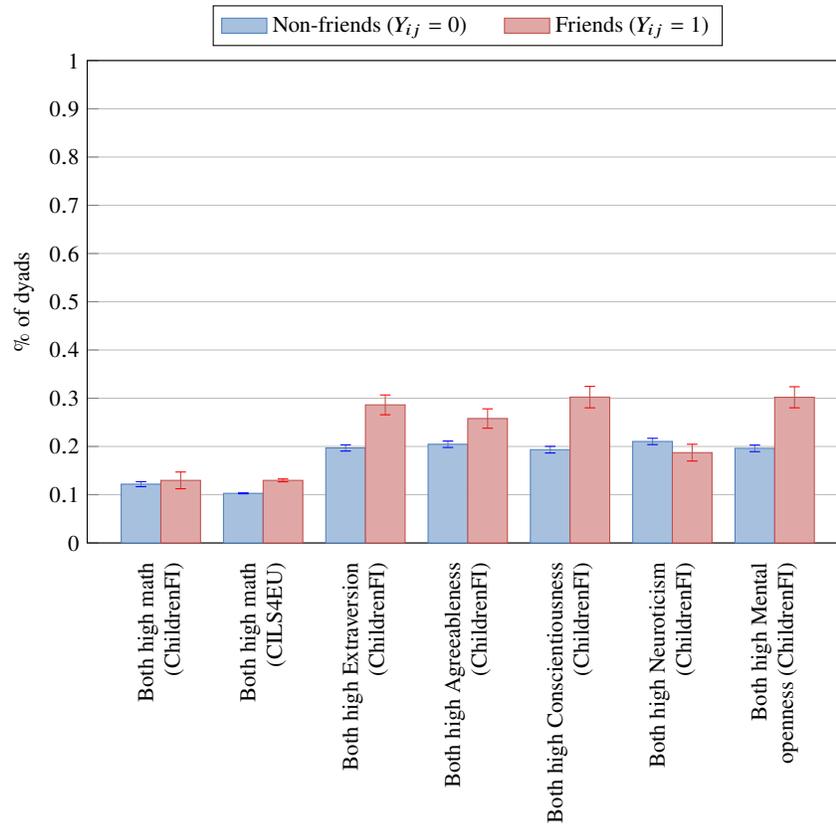


Table 6: Benchmark estimates (ChildrenFI data)

Logit estimates · Average marginal effects, clustered SEs in parentheses					
	(1)	(2)	(3)	(4)	(5)
Same gender	.159*** (.008)	.158*** (.008)	.161*** (.006)	.162*** (.006)	.162*** (.006)
Same country of origin	.042** (.018)				
Different mig. background		-.019* (.011)			
Genetic F_{ST}			-.013*** (.004)		-.004 (.005)
Cultural F_{ST}				-.005*** (.001)	-.005*** (.001)
Same religion	.026 (.017)	.032* (.017)	.033* (.017)	.018 (.018)	.017 (.019)
Abs. difference: age	-.006 (.006)	-.006 (.006)	-.006 (.008)	-.005 (.008)	-.005 (.008)
Abs. difference: rooms	-.003 (.003)	-.003 (.003)	-.004 (.004)	-.003 (.004)	-.003 (.004)
Class and time fixed effects	✓	✓	✓	✓	✓
Shares of students with same characteristics	✓	✓	✓	✓	✓
Number of common friends	✓	✓	✓	✓	✓
F_{ST} and CF_{ST} jointly nonsignificant (p-value)					< .001
N (dyads)	8,159	8,159	6,725	6,725	6,725
Pseudo- R^2	.284	.282	.299	.302	.302

One, two, and three asterisks denote significance at the 10, 5, and 1 percent level, respectively

Table 7: Benchmark estimates (CILS4EU data)

Logit estimates · Average marginal effects, clustered SEs in parentheses					
	(1)	(2)	(3)	(4)	(5)
Same gender	.100*** (.001)	.100*** (.001)	.102*** (.001)	.103*** (.002)	.103*** (.002)
Same country of origin	.041*** (.002)				
Different mig. background		-.021*** (.001)			
Genetic F_{ST}			-.012*** (.001)		-.002 (.002)
Cultural F_{ST}				-.001*** (.000)	-.001*** (.000)
Same religion	.020*** (.001)	.023*** (.002)	.023*** (.002)	.020*** (.002)	.018*** (.002)
Abs. difference: age	-.005*** (.001)	-.006*** (.001)	-.007*** (.001)	-.007*** (.001)	-.007*** (.001)
Abs. difference: rooms	-.001*** (.000)	-.001*** (.000)	-.001*** (.000)	-.001*** (.000)	-.001*** (.000)
Class and time fixed effects	✓	✓	✓	✓	✓
Shares of students with same characteristics	✓	✓	✓	✓	✓
Number of common friends	✓	✓	✓	✓	✓
F_{ST} and CF_{ST} jointly nonsignificant (p-value)					< .001
N (dyads)	250,519	250,519	178,688	176,902	168,396
Pseudo- R^2	.362	.360	.360	.361	.362

One, two, and three asterisks denote significance at the 10, 5, and 1 percent level, respectively

Figure 3: Marginal effects of same sex at representative values of F_{ST} and CF_{ST} , with 95% confidence intervals

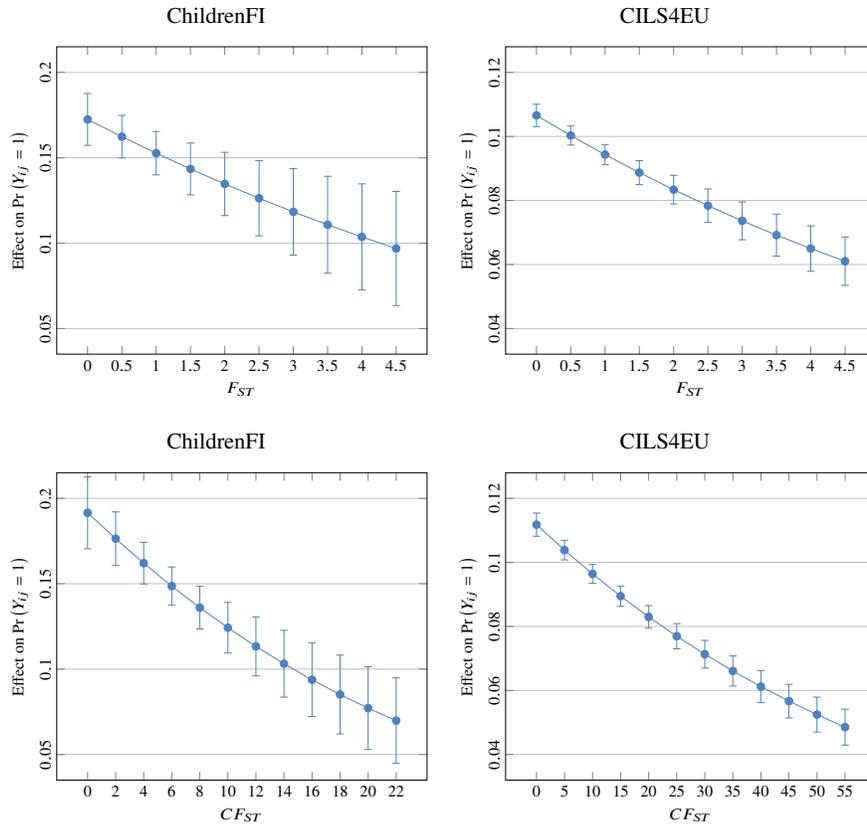


Table 8: Estimates: elective affinities (ChildrenFI and CILS4EU data)

Logit estimates · Average marginal effects, clustered SEs in parentheses				
	(1)	(2)	(3)	(4)
	CILS4EU [§]	ChildrenFI	ChildrenFI	ChildrenFI
Same gender	.104*** (.001)	.163*** (.007)	.162*** (.009)	.163*** (.009)
Same country of origin	.043*** (.003)	.042** (.018)	.048** (.019)	.049** (.019)
Same religion	.018*** (.002)	.026 (.018)	.025 (.019)	.024 (.019)
Both high math	.014*** (.002)	.033*** (.008)		.009 (.011)
Both low math	.010*** (.002)	.013* (.008)		.013 (.014)
Both high Extraversion			.018*** (.005)	.017*** (.005)
Both low Extraversion			-.006 (.009)	-.007 (.010)
Both high Agreeableness			.006 (.009)	.005 (.009)
Both low Agreeableness			-.009 (.012)	-.012 (.011)
Both high Conscientiousness			.017*** (.005)	.015** (.006)
Both low Conscientiousness			-.008 (.009)	-.008 (.010)
Both high Neuroticism			-.016* (.009)	-.017* (.010)
Both low Neuroticism			-.010 (.009)	-.008 (.010)
Both high Mental openness			.019** (.008)	.016* (.009)
Both low Mental openness			.010 (.009)	.010 (.011)
Other covariates included in benchmark specification	✓	✓	✓	✓
All controls for confoundings	✓	✓	✓	✓
High math and high Conscientiousness jointly nonsignificant (p-value)				.019
High math and high Mental openness jointly nonsignificant (p-value)				.049
<i>N</i> (dyads)	165,465	7,938	6,146	6,036
Pseudo- <i>R</i> ²	.361	.287	.302	.303

One, two, and three asterisks denote significance at the 10, 5, and 1 percent level, respectively

[§]England and Sweden: wave 2 only